LASER SHOW SYSTEM

Jupiter

User's Manual

This chart lists the DMX dipswitch setting for DMX address 1 through 511. Follow the instructions below to configure fixture dipswitches with you desired DMX address.

DMX Address Quick Reference Chart

DipSwitch Position

DMX:DIPSWITCH SET																				
0=OFF					#9	0	0	0	0	0	0	0	0	1	1	1	1	1	1	1	1
1=ON					#8	0	0	0	0	1	1	1	1	0	0	0	0	1	1	1	1
					#7	0	0	1	1	0	0	1	1	0	0	1	1	0	0	1	1
X=OFF or ON					#6	0	1	0	1	0	1	0	1	0	1	0	1	0	1	0	1
#1	#2	#3	#4	#5																	
0	0	0	0	0			32	64	96	128	160	192	224	256	288	320	352	384	416	448	480
1	0	0	0	0		1	33	65	97	129	161	193	225	257	289	321	353	385	417	449	481
0	1	0	0	0		2	34	66	98	130	162	194	226	258	290	322	354	386	418	450	482
1	1	0	0	0		3	35	67	99	131	163	195	227	259	291	323	355	387	419	451	483
0	0	1	0	0		4	36	68	100	132	164	196	228	260	292	324	356	388	420	452	484
1	0	1	0	0		5	37	69	101	133	165	197	229	261	293	325	357	389	421	453	485
0	1	1	0	0		6	38	70	102	134	166	198	230	262	294	326	358	390	422	454	486
1	1	1	0	0		7	39	71	103	135	167	199	231	263	295	327	359	391	423	455	487
0	0	0	1	0		8	40	72	104	136	168	200	232	264	296	328	360	392	424	456	488
1	0	0	1	0		9	41	73	105	137	169	201	233	265	297	329	361	393	425	457	489
0	1	0	1	0		10	42	74	106	138	170	202	234	266	298	330	362	394	426	458	490
1	1	0	1	0		11	43	75	107	139	171	203	235	267	299	331	363	395	427	459	491
0	0	1	1	0		12	44	76	108	140	172	204	236	268	300	332	364	396	428	460	492
1	0	1	1	0		13	45	77	109	141	173	205	237	269	301	333	365	397	429	461	493
0	1	1	1	0		14	46	78	110	142	174	206	238	270	302	334	366	398	430	462	494
1	1	1	1	0		15	47	79	111	143	175	207	239	271	303	335	367	399	431	463	495
0	0	0	0	1		16	48	80	112	144	176	208	240	272	304	336	368	400	432	464	496
1	0	0	0	1		17	49	81	113	145	177	209	241	273	305	337	369	401	433	465	497
0	1	0	0	1		18	50	82	114	146	178	210	242	274	306	338	370	402	434	466	498
1	1	0	0	1		19	51	83	115	147	179	211	243	275	307	339	371	403	435	467	499
0	0	1	0	1		20	52	84	116	148	180	212	244	276	308	340	372	404	436	468	500
1	0	1	0	1		21	53	85	117	149	181	213	245	277	309	341	373	405	437	469	501
0	1	1	0	1		22	54	86	118	150	182	214	246	278	310	342	374	406	438	470	502
1	1	1	0	1		23	55	87	119	151	183	215	247	279	311	343	375	407	439	471	503
0	0	0	1	1		24	56	88	120	152	184	216	248	280	312	344	376	408	440	472	504
1	0	0	1	1		25	57	89	121	153	185	217	249	281	313	345	377	409	441	473	505
0	1	0	1	1		26	58	90	122	154	186	218	250	282	314	346	378	410	442	474	506
1	1	0	1	1		27	59	91	123	155	187	219	251	283	315	347	379	411	443	475	507
0	0	1	1	1		28	60	92	124	156	188	220	252	284	316	348	380	412	444	476	508
1	0	1	1	1		29	61	93	125	157	189	221	253	285	317	349	381	413	445	477	509
0	1	1	1	1		30	62	94	126	158	190	222	254	286	318	350	382	414	446	478	510
1	1	1	1	1		31	63	95	127	159	191	223	255	287	319	351	383	415	447	479	511

DipSwitch Position **DMX Address**

Notes:

1. DMX console can not be used in Master-Slave operation (Sound Active or AUTO mode).
2. There should be only one master unit in Master-Slave operation.

Jupiter Troubleshooting

1. In Stand-Alone operation, if the power supply indicator is light up and sound active indicator isn't light up, but the laser is shut off doesn't work, Please check if unit has been set up in slave mode, then set up in master mode.
2. In Master-Slave operation, slave unit don't function, please check as below.

A. Make sure to there's only one master in the chain, and the others are set in slave mode.

B. Make sure to control the unit without DMX console controlling.

C. Make sure to take a good quality power cable and connection.

3. In DMX mode operation, the laser is OFF and the DMX signal indicator is unlighted, please check as below.

Make sure to set up the DMX mode, make sure to have a good connection.

4. In DMX operation, the unit can't be controlled by the DMX console, but the DMX signal indicator is flashing, please make sure the DMX console and unit have the same channel.
5. If the unit is fail, please turn off the unit, then turn on again after 5 minutes.

After trying the above solution you still have a problem, please contact your dealer or our company for service.

Jupiter General instructions

Unpacking:

Thank you for purchasing this product. Please read user guide for safety and operations information before using the product. Keep this manual for future reference. This product can create perfect laser programs and effects since it has passed a series of strictly tests before delivery. Please check the attachments listed on the page after opening the carton. In the event of carton damage or attachment missing in transit, please contact your dealer or our after sales service department.

Attachments:

1. Laser Light:	1PCS
2. Power Cable:	1PCS
3. User Guide:	1PCS

Notice:

1. Do not exposure the human eye direct to laser beam.
2. Do not turn on and off the unit frequently.
3. Before using this unit make sure the power supply is ground.
4. This unit is intended for indoor use only and should be prevented form water, moisture and shake. The working temperature of this unit is 18～30℃, do not use this continuously over 4 hours, otherwise it shortens the lifetime of the unit.
5. Use cleaning tissue to remove the dust absorbed on the external lenses periodically to optimize light output.
6. Do not remove or break the warranty label, otherwise it void the warranty.
7. Always replace with the exact same type fuse, replacement with anything other than the specified fuse can cause fire or electric shock and damage your unit, and will void your manufactures warranty.

DANGER

LASER RADIATION AVOID EXPOSURE

TO BEAM CLASS 3B LASER PRODUCT

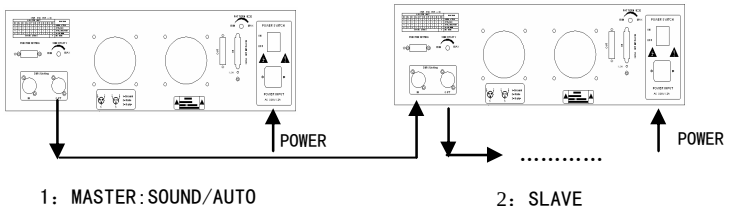
Jupiter Technical Specification

1. Voltage: □AC220V/ □110V, 50HZ/60HZ, Fuse 2A/250V
2. Rated Power: 80W
3. Scanner: High-speed optical scanner, big angle scanning
4. Laser:
   Green laser: 532nm wavelength 1000mW
5. Working Modes: Sound Active, AUTO-Beam, AUTO-Animation, DMX512 (12 CH), Master/Slave, PC Control
6. Graphics & Effects: 128 beam show and animated graphics show patterns
7. Interface: 3 pins XLR jack for DMX or Maser-Slave linking
   DB25/M ILDA computer interface for PC control
8. Size: 600*470*290mm
9. Weight: 18

Jupiter Features

1. RGB full-color animation laser with high-speed optical scanner to create animated graphics, 128 beam show and graphics show patterns, and with the function of unique blanking, frequently flashing, rotating, moving, rotation, split, zoom, drawing, speed and color etc.
2. Includes six working modes as DMX512, Sound Active, AUTO-Animation, AUTO-Beam, Master/Slave and PC control(with DB25 ILDA computer interface) for different applications.
3. The unit has fourteen channels to control in DMX mode. The unit has BLACK OUT function. The uint will shut off if no DMX512 signal.
4. Compatible ILDA laser show software with ILDA interface. Use electronic switches to conversion full ILDA signal. The uint will shut off if no ILDA signal.
5. Design according to security and good performance, safer to human and environment. Master/Slave mode, DMX512 mode and PC Control mode, will shut off laser automatically without trigger signal.

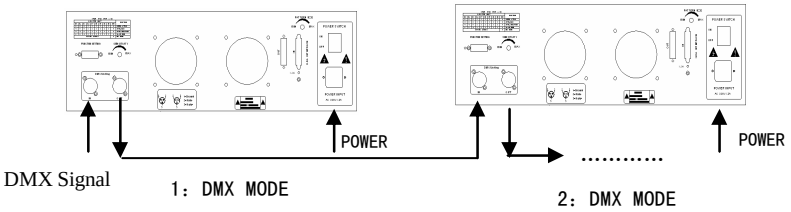
5. The units will react to the low frequencies of music via the internal microphone. Adjust the audio sensitivity knob on the back of the master unit to make the unit more or less sensitive in sound active.The panel has LED indicating for sound active.



Universal DMX Operation (DMX mode)

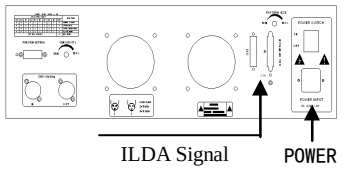
This mode allows you to use universal DMX-512 console to operate.

1. Install the units in a suitable position (laying or appending).
2. Use standard XLR microphone cable chain your units together via the XLR connector on the rear of the units. For longer cable runs we suggest a terminator at the last fixture.
3. Assign a DMX address to each the unit using dipswitches, see the "DMX Address Quick Reference Char".
4. Turn on the all units' power, the units begins reset, then the unit begins working.
5. Use DMX console to control your units.



PC Control Operation

This mode allows you to use PC software(for example: Pangolin, Phenix, Mamba) to operate
If no IDLA signal to DB25 jack in ILDA mode, the laser and scaner will is closed for protection. The scan speed of software coltrol must be less than 15000 PPS, otherwise, the patterns possible have distortion, or the scaner is protected possibly by built-in circuitry.



One loop address=1, two loop address=17, three loop address=33, four loop address=49

Loop	Address	Binary	Dipswitches
1	1	100000000	＃1 (＃1 switch is ON, the others are OFF)
3	17	100010000	＃1+#5 (＃1 and #5 switches are ON)
3	33	100001000	＃1+#6 (＃1 and #6 switches are ON)
4	49	100011000	＃1+#5+#6 (＃1,5,6 switches are ON)

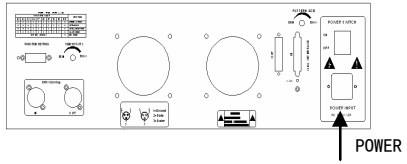
The dipswitches setting for DMX address see the " DMX Address Quick Reference Chart ".

Jupiter Operation

Stand-Alone Operation (Sound Active, AUTO mode)

The mode allows a single unit to react to the beat of the music in the master mode.

1. Install the units in a suitable position (laying or appending).
2. Set dipswitch to select Sound Active or AUTO mode.
3. Turn on the unit power, the unit begins reset, then the unit begins working.
4. The unit will react to the low frequencies of music via the internal microphone. Adjust the audio sensitivity knob on the back of the unit to make the unit more or less sensitive in sound active.The panel has LED indicating for sound active.



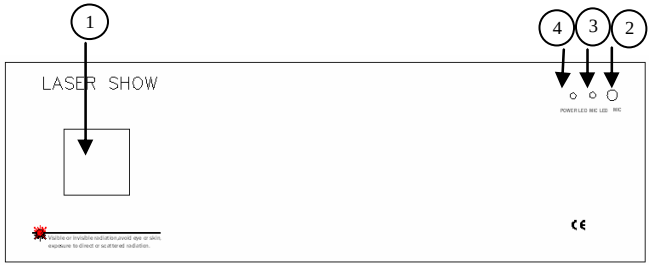
1: Master: Sound/AUTO

Master-Slave Operation

This mode will allow you to link up to many units together without controller.

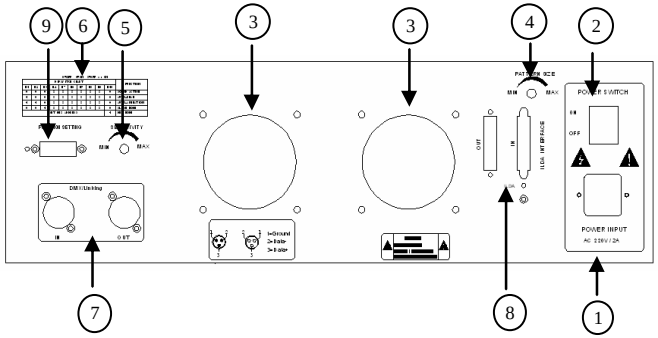
1. Install the units in a suitable position (laying or appending).
2. Choose a unit to function as Master mode, set dipswitch to select Sound Active or AUTO mode. The others must be set to Slave mode, set dipswitch to select Slave mode.
3. Use standard XLR microphone cable chain your units together via the XLR connector on the rear of the units. For longer cable runs we suggest a terminator at the last fixture.
4. Turn on the all units' power, the units begins reset, then the unit begins working. The slave units will react the same as the master unit.

Jupiter Front/Rear Panel



Front Panel Figure

1. Laser aperture
2. Sound active microphone
3. Sound active indicator:Blue
4. Power indicator:Red



Rear Panel Figure

1. Power jack
2. Power switch
3. Cooling fan
4. Pattern size knob
5. Audio sensitivity knob
6. Function reference chart
7. DMX or linking jack
8. ILDA interface with DB25 jack
9. Function of built-in program setting dipswitches

Jupiter Function & Setting

Sound Active

The change of the laser pattern is controlled by sound, that is, the rhythm of the sound control the effect of the changing laser pattern.

AUTO

Auto cycles the built-in programs without being controlled externally. It has no laser OFF.

DMX Control

The system only accepts the DMX512 signal of international standard to control the system.

DMX Control Parameter Chart

Channel	Function	Value	Description
CH1	Mode	0～49	Sound Active mode
		50～99	Auto-Beam mode
		100～149	Auto-Animation mode
		150～199	Manual mode to Auto run
		200～255	Manual mode to Sound Active run
CH2	Dimmer	0～255	L816G: closed~no blanking~moving blanking~flash blanking~blanking
			L818RGY: closed~red~green~yellow~ fixed color~random single color~random three-color~moving three-color~fixed color
CH3	Pattern Select	0～255	256 or 128 pattrens
CH4	Moving-Y	0～127	Manual to up to down moving
		128～191	Auto to down moving
		192～255	Auto to up moving
CH5	Moving-X	0～127	Manual to left to right moving
		128～191	Auto to right moving
		192～255	Auto to left moving
CH6	Rolling-X	0～127	Manual rolling
		128～255	Auto rolling
CH7	Rolling-Y	0～127	Manual rolling
		128～255	Auto rolling
CH8	Rotation	0～127	Manual rotation
		128～191	Auto clockwise rotation
		192～255	Auto counter clockwise rotation
CH9	Zoom(+/-)	0～85	Auto zoom(+)
		86～170	Auto zoom(-)
		171～255	Manual zoom(+/-)
CH10	Pattern Size	0～255	0 is Moderate, 1 is small, 255 is big
CH11	Display Dot	0～255	0 is display dot, 255 is best brightness

Channel	Function	Value	Description
CH12	Drawing	0~127	Auto drawing mode 1
		128~255	Auto drawing mode 2

Function setting

If it is set to ILDA mode (use PC software to control laser light), just need to connect ILDA signal to DB25 jack. If set to Built-in program, then ILDA signal cannot be connected,seting dipswitches directly is ok. ILDA mode (PC control) and Built-in program mode can be identified and transisted automatically.

0＝OFF 1=ON X=OFF or ON

DIPSWITCH CHART										FUNCTION
#1	#2	#3	#4	#5	#6	#7	#8	#9	#10	
0	0	0	X	X	X	X	X	X	0	SOUND ACTIVE
1	0	0	X	X	X	X	X	X	0	AUTO-BEAM
1	1	0	X	X	X	X	X	X	0	AUTO-ANIMATION
0	0	1	X	X	X	X	X	X	0	SLAVE MODE
SET DMX ADDRESS									1	DMX MODE

Built-In Program Function Chart

DMX address calculation

For DMX mode, DMX address from #1 to 9# dipswitches must be set, the address is set from 1 to 511. Each dipswitch represents a binary value.

Dipswitch	Value	Dipswitch	Value
#1	1	#6	32
#2	2	#7	64
#3	4	#8	128
#4	8	#9	256
#5	16	#10	DMX, Set to "1"

One unit has 12 channels for DMX control, so each unit must be assigns 12 channels at least

We may assign 16 channels for one unit, then DMX address = 16*N + 1, N=0, 1, 2, 3 ……

Example

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